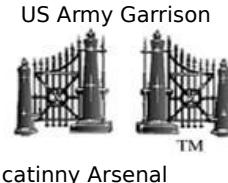




# Agenda for 11 June 2014

## Picatinny Arsenal

### Restoration Advisory Board

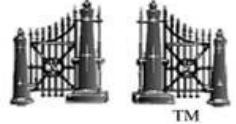


- **Attendance, Introductions & Correspondence**
- **Old Business**
- **TAPP Contract Financial Report and Path Ahead**
- **26 Site Proposed Plan and Public Meeting Update**
- **Former Burning Grounds Update**
- **48 Site Feasibility Study and Proposed Plans**
- **Update in a Minute**
- **Synopsis and Next Meeting**



# TAPP Financial Report Update

US Army Garrison



Picatinny Arsenal

Contract awarded September 2011 with 2 Option Years via Purchase Order;  
1<sup>st</sup> and 2<sup>nd</sup> option years were exercised

## **Picatinny Contract Option Year 2 to SEP 14:**

Purchase Order Value **\$ 24,052.84**  
Spent \$ 9,083.77  
\$14,969.07

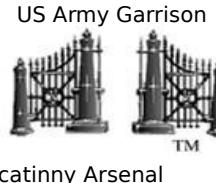
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**Purchase Order terminates on Sept 19<sup>th</sup>, 2014**

**This option year of the contract is also the last year of the Army's 2<sup>nd</sup> Waiver Request for a TAPP grant.**

Method of selecting what TAPP reviews: Doodle polls with a minimum of two votes in favor needed for a review. Continue to send executive summaries, report or reports summaries prior to the Doodle Vote

Recent reviews: Area C LTM Report Round H; PICA 205 2013 Annual GW Report, PICA 079 Annual Report, PICA 076 Annual Report, 3 Site FS, Area E Annual Report, 300 Marsh Letter Report, Post Farm Annual Report.

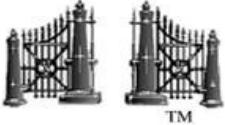


Update-in-a-Minute  
Installation Restoration Program (IRP)  
&  
Military Munitions Response Program (MMRP)  
11 June Presentation to the  
Picatinny Arsenal  
Restoration Advisory Board



# CERCLA Status of ARCADIS IRP PBC Sites

US Army Garrison

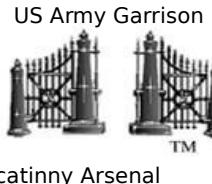


Picatinny Arsenal

	RI	FS	PP	ROD	RD	RA	RAR	LTM/O	Comments
PICA 01 (26 Site Group)	Completed	Complete	Complete	Complete		Not Required - NFA Remedy			NFA with Monitoring of Land Use
PICA 96 (26 Site Group)	Completed	Completed	Complete	Draft		Not Required - NFA Remedy			NFA with Monitoring of Land Use
PICA 11 (45 Site Group)	Completed	Almost Complete	Draft Complete	Jul-14		Not Required - NFA Remedy			NFA with Monitoring of Land Use
PICA 11 (3 Site Group)	Completed	Almost Complete	Draft Complete	Jul-14	Follow on PBC				Soil Removal Action at 3 Sites
PICA 08 (Group 3 Sites)	Completed	Complete	Complete	Complete	Complete	Complete	Complete	On Going	Concentrations nearly at Clean Up Goals
PICA 13 (Building 91 GW)	Completed	Complete	Complete	Complete	Complete	Complete	Complete	On Going	Concentrations below clean up goals
PICA 20 (Group of 13 Sites)	Completed	Complete	Complete	Complete	Complete	Complete	Complete	On Going	LUCs
PICA 57 (Lakes Group)	Completed	Draft	Jul-14	Follow on PBC	Follow on PBC				Goal to achieve NFA/LUC ROD before December 2014
PICA 57 (Non Lakes Group)	Completed	Complete	Follow on PBC		Not Required - NFA Remedy				Goal to achieve NFA/LUC ROD before December 2014
PICA 65 (Post Farm Landfill)	Completed	Complete	Complete	Complete	Complete	Complete	Complete	On Going	Concentrations below clean up goals
PICA 66 (Site 20/24)	Completed	Completed						On Going	LUCs
PICA 67 (Sanitary Landfill)	Completed	Completed	Complete	Complete	Complete	Complete	Complete	On Going	LUCs
PICA 72 (Former DRMO)	Completed	Completed	Complete	Complete	Complete	Complete	Complete	On Going	LUCs
PICA 76 (Area D GW)	Completed	Completed			Complete	Complete	Complete	On Going	MNA occurring faster than originally predicted
PICA 77 (Area E GW)	Completed	Completed	Complete	Complete	Complete	Complete	Complete	On Going	MNA occurring faster than originally predicted
PICA 79 (Group 1 Sites)	Completed	Completed	Complete	Complete	Complete	Complete	Complete	On Going	LTM of groundwater and sediment ongoing
PICA 93 (Waste Piles)	Completed	Completed	Complete	Complete	Complete	Complete	Complete	On Going	LUCs
PICA 102 (Waste Dumps)	Completed	Completed	Complete	Complete	Complete	Complete	Complete	On Going	LUCs
PICA 193 (Green Pond Brook)	Completed	Completed				Complete	Complete	On Going	LTM of sediment and surface water
PICA 204 (Mid Valley GW)	Completed	Complete	Complete	Complete	Complete	Complete	Complete	On Going	1.5 years (of 23 complete)
PICA 205 (Area B GW)	Completed	Completed	Complete	Complete	Complete	Complete	Complete	On Going	Concentrations nearly at Clean Up Goals



# CERLCA Status of Non-ARCADIS and MMRP Sites



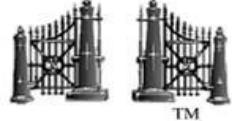
	RI	FS	PP	ROD	RD	RA	RAR	LTM/O	Comments
PICA 111 Sites	Complete	Complete	Follow on PBC	Potentially not required as it is an NFA site					NFA with Monitoring of Land Use
Former Skeet Range (CC-057)	Complete	Follow on PBC					Action required, wil be made part of MMRP site		
600 Hill GW (PICA 058)	Complete	Complete	Follow on PBC					Action required, wil be made part of MMRP site	
Area C, Southern Boundary GW	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Ongoing	Monitoring of Groundwater
PICA-003-R-01, 1926 Explosion Radius	Almost Complete	Follow on PBC			Follow on PBC				
PICA-003-R-02, Fuze Area	Almost Complete	Follow on PBC			Follow on PBC				
PICA-006-R-01, 1926 Explosion Radius – Off-Post	Almost Complete	Follow on PBC			Follow on PBC				
PICA-006-R-02, Former Operational Areas Mortar Range	Almost Complete	Follow on PBC			Follow on PBC				
PICA-008-R-01, Lakes MRS	Almost Complete	Follow on PBC			Follow on PBC				
PICA-010-R-01, Shell Burial Grounds	Almost Complete	Follow on PBC			Follow on PBC				
PICA-012-R-01, Lake Denmark – Off-Post	Almost Complete	Follow on PBC			Follow on PBC				
PICA-013-R-01, Inactive Munitions Waste Pit	Almost Complete	Follow on PBC			Follow on PBC				
PICA-014-R-01, Inactive Munitions Waste Pit – Off-Post	Almost Complete	Follow on PBC			Follow on PBC				





# Status of Installation Restoration Program Investigations

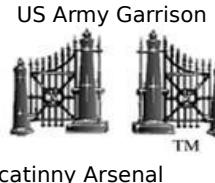
US Army Garrison



- **Installation Restoration Program  
Remedial Investigations considered  
complete**
- **Marsh Report Site Investigation  
Report is considered complete although  
new area “East Side of Green Pond  
Brook” will need to be investigated**



# Status of IRP Feasibility Studies (FSs)



- **600 Hill Groundwater FS approved**

**Lakes FS: Document to be resubmitted based on sampling results and as discussed at FEB meeting**

**48 Site FS: All sites with acceptable risk consistent with No Action; only two alternatives - No Action and No Action with Monitoring; NJDEP provides comments. Briefing paper by TAPP. Tracked-changed version approved by EPA**

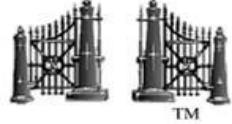
**Non-Lakes Sites: all sites with acceptable risk submitted consistent with No Action. Tracked-changed version approved by EPA**

- **3 Site FS: Dispute resolved and new FS submitted and approved by the EPA and comments received from NJDEP**



## Status of Proposed Plans

US Army Garrison

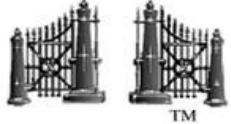


- **PICA 111 NFA Proposed Plan: Submitted in June 2013, new 2014 contractor to make modifications**
- **26 Site NFA Proposed Plan: Submitted in June and public meeting tonight**
- **3 Site Proposed Plan submitted and commented on by EPA and DEP**



# Status of Records of Decision

US Army Garrison



- **Signed RODs, Implemented:**

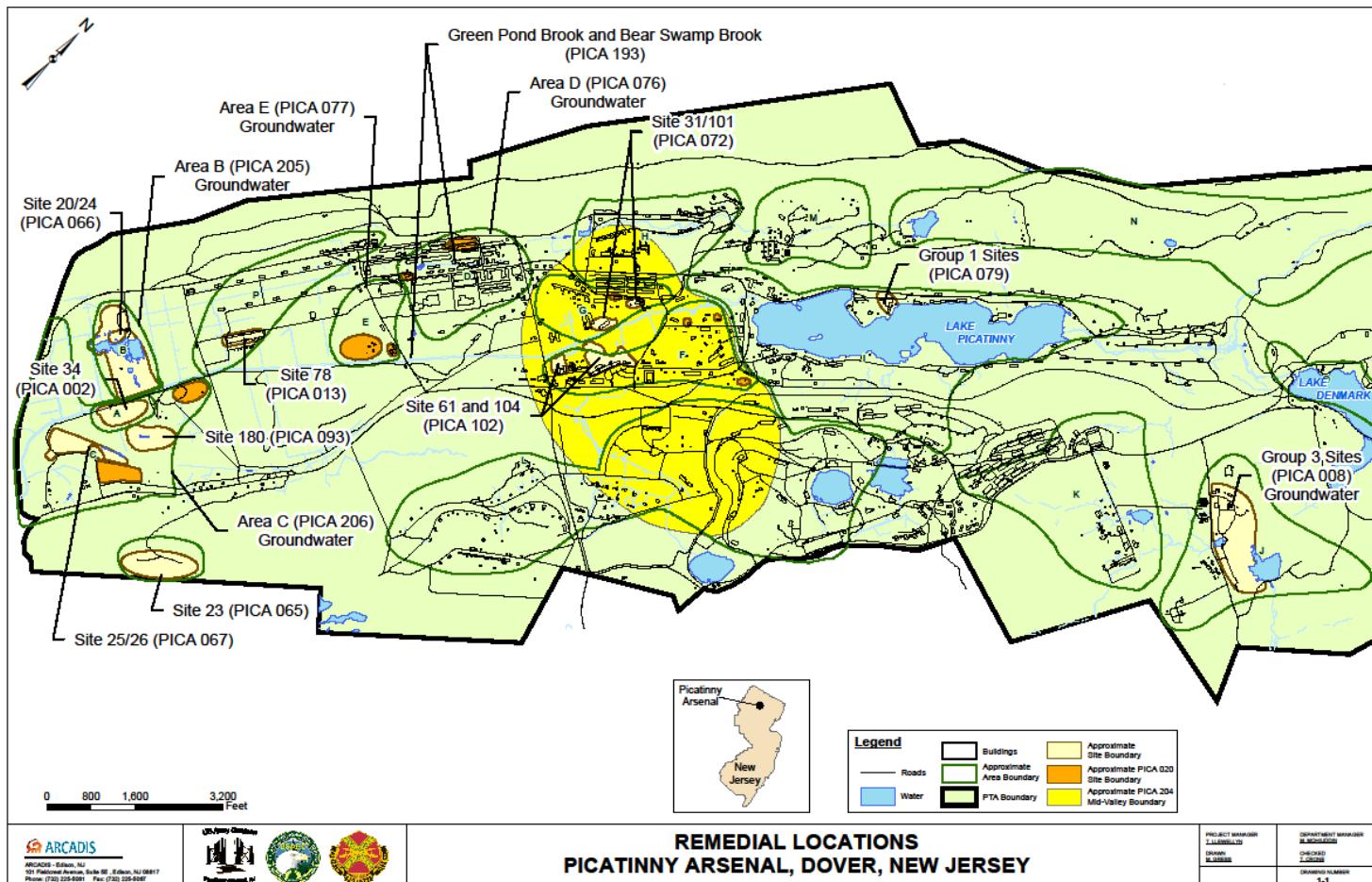
- Site 20/24 considered complete except LUC monitoring
- Post Farm: Action is considered complete except for monitoring
- Green Pond/ Bear Swamp Brook: Only monitoring remains
- Area D Groundwater: Permeable Reactive Barrier monitoring continues
- Site 25/26: ICs and vegetative cover considered complete
- Site 180 ROD: Complete except LTM
- Area E Groundwater: Consider complete except for the MNA monitoring
- 13 Sites Institutional ROD PICA 20: LUCs ongoing
- Site 61/104: considered complete
- Area B Groundwater: Considered *Remedy in Place*
- Site 31/101 DRMO Yard: Complete except for LUC
- Southern Boundary/Area C: LTM continues
- Group 1 GW and soils: Considered complete except monitoring
- Group 3 GW and surface water: Considered complete except monitoring
- Site 78, PICA 13 GW and SW: Considered complete except monitoring
- MidValley Groundwater: Remediation ongoing

**-25 Sites NFA Record of Decision being public noticed**

**-Former Burning Grounds (PICA 02): Explanation of Differences to be public noticed**



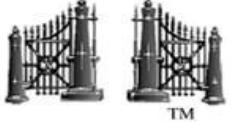
# Sites with Signed Records of Decision





# Remedial Action Reports & Long Term Monitoring Reports

US Army Garrison

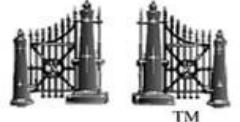


Picatinny Arsenal

- **MidValley Groundwater Interim Remedial Action Report**
- **Post Farm**
- **Site 180**
- **Site 25/26**
- **Area B GW**
- **Area E GW**
- **Area D GW**
- **Green Pond Brook/Bear Swamp Brook**
- **Site 104/61 Report**
- **Area C GW**
- **Group 1 GW**
- **Group 3 GW**
- **PICA 13/Site 78 GW**
- **MidValley Groundwater**
- **Land Use Control Annual Certification**



US Army Garrison



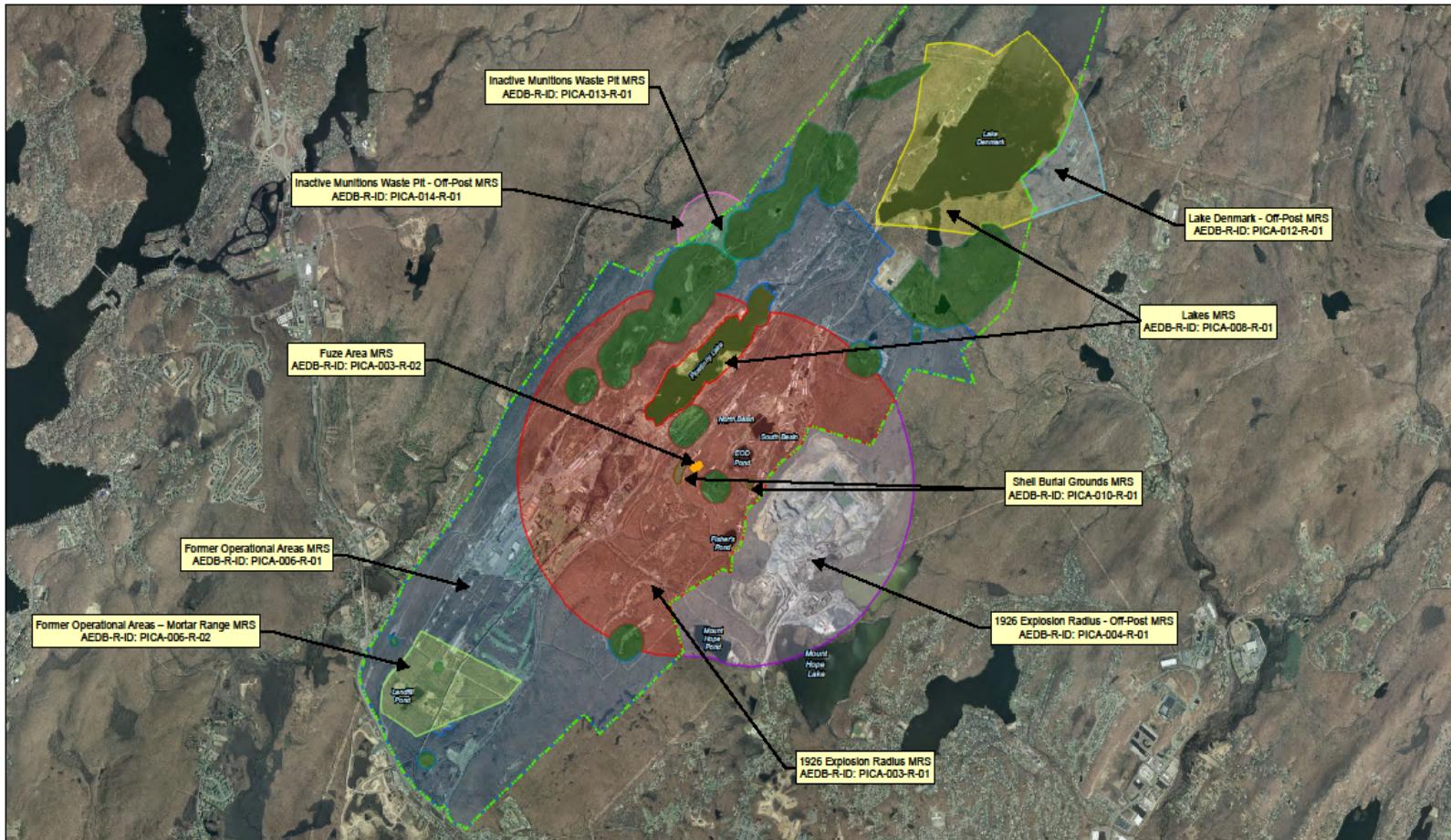
## Update on the MMRP

### Status of the MMRP Remedial Investigation

- RI Workplan Approved in April 2012
- Field Work complete 2012 - 2013
- Report submitted: December 2013
- Comments Provided: February 2014
- Responses to Comments process: April 2014
- NJDEP approval & few EPA comments: May 2014
- Re-submittal of RI and approval: by the next RAB

# Military Munitions Response Program

## Munitions Response Sites



Legend

- Installation Boundary
- Operational Range Areas
- Munitions Response Sites
- 1926 Explosion Radius
- 1926 Explosion Radius - Off-Post
- Mortar Range MR8
- Former Operational Areas
- Inactive Munitions Waste Pit
- Inactive Munitions Waste Pit - Off-Post
- Lake Denmark - Off-Post
- Lakes
- Shell Burial Grounds
- Fuze Area MR8

**NOTES:**  
Base Imagery: NJ 2007 Natural Color Imagery  
Data Source: Army GIS Layers (August 2011)  
  
Coordinate System: UTM Zone 18N  
Datum: WGS84, Units: Feet

Picatinny Arsenal  
Morris County,  
New Jersey

WESTON  
CONTROLS

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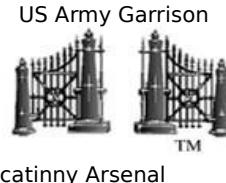
# Military Munitions Response Program

## Investigation Conclusions

Munitions Response Site (MRS)	MEC Assessment	MC Assessment	MRSPP	Feasibility Study
<b>1926 Explosion Radius</b>	Exposure pathways complete.	Exposure pathways incomplete.	3	Address explosive hazards.
<b>Fuze Area**</b>	Exposure pathways complete.	Exposure pathways incomplete.	3	Address explosive hazards.
<b>1926 Explosion Radius - Off-Post</b>	Exposure pathways complete.	Exposure pathways incomplete.	4	Address explosive hazards.
<b>Shell Burial Grounds</b>	Exposure pathways complete.	Exposure pathways incomplete.	5	Address explosive hazards.
<b>Green Pond</b>	Combined with 1926 Explosion Radius			
<b>Former Operational Areas</b>	Exposure pathways complete.	Exposure pathways incomplete.	3	Address explosive hazards.
<b>Mortar Range**</b>	Exposure pathways complete.	Exposure pathways incomplete.	3	Address explosive hazards.
<b>Lakes MRS</b>	Exposure pathways complete.	Exposure pathways incomplete.	4	Address explosive hazards.
<b>Lake Denmark - Off-Post</b>	Exposure pathways incomplete.	Exposure pathways incomplete.	No Known or Suspected MEC, CWM, or MC Hazard	Assess No Further Action Alternative.
<b>Inactive Munitions Waste Pit</b>	Exposure pathways complete.	Exposure pathways incomplete.	4	Address explosive hazards.
<b>Inactive Munitions Waste Pit - Off-Post</b>	Exposure pathways incomplete.	Exposure pathways incomplete.	No Known or Suspected MEC, CWM, or MC Hazard	Assess No Further Action Alternative.



# Update On Final Non-time Critical Removal Action Interim Land Use Control Plan

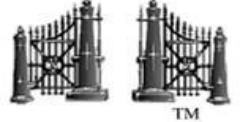


- In 2010, for number of Army installations, established Land Use Controls (LUCs) as an interim action while the MRSs progress to a final remedy within the framework of CERCLA. MRS not located on Army-owned land would not be addressed.
- Approved Engineering Evaluation/Cost Analysis public noticed **Nov-Dec 2011**.
- *The Action Memorandum, Interim Land Use Controls, Picatinny Arsenal for 1926 Explosion Radius (PICA-003-R-01), Green Pond Site (PICA-005-R-01), Former Operational Areas (PICA-006-R-01), Lakes Sites (PICA-008-R-01), Shell Burial Grounds (PICA-010-R-01), and Inactive Munitions Waste Pit (PICA-013-R-01), Military Munitions Response Program (Action Memorandum or AM) signed by the installation's Garrison Commander on 3 April 2012.*
- *Land Use Control Plan approved and final in **January 2013**.*



## LUC Components

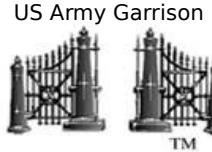
US Army Garrison



- Continued Existing Controls – via Safety Office
- “Dig” Permits via Safety Office
- Notations in Master Plan and on GIS layer
- Fences as necessary: Fences not installed around Lake Denmark based on findings from RI
- Signs put around Fuze Area based on RI Findings.



# Construction Support and Avoidance Since LUCWP

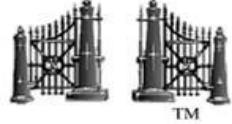


- Chugach with subcontractor (smaller projects):  
Gas line, B462, B162 B221 Electric, 900 area pole installation, B717 Conex containers, B477 Install Hydrant , EOD pond Schrader Rd signs, B1 sink hole, B404 catch basin, B455 Utility Poles, ,SREC B403, B162 Bollards and signs, 3022,3024 footings, B3106 Utility trench, UXO support for the demolition of B437, B183 sidewalk, B1 Signs, B404 head wall, B3100 boiler, pad B354 Sign, B3338 Drain, Range 656 well, UXO support B462, B3359 Utility Poles, 600 Area access control Install signs, B74 Remove Guard Shack , B321 Waterline, B151 Silt fence cable bridge, B266 Air handler, replace pole Belt Rd , B176 Excavation, ,Escort 1000 Area, utility pole B903, B151 Installation of Gun Pad, B3208 Electric Line, B717 SREC Pole, Install B200 Parking Lot at Fuel Station....and many more.
- Corps with PIKA:  
900 bunker construction support



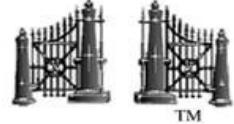
...and for the future

US Army Garrison



Picatinny Arsenal

- Non-Time Critical Removal Action ends at ROD for each site
- Major Construction at Picatinny very limited in near future
- Update GIS and Master Plan



- **2014 Installation Action Plan (IAP) is now being updated**  
2013 IAP has been on Picatinny Web page.
- **Defense State Memorandum of Agreement JEP 2- Year Workplan is approved**
  - This is how the New Jersey is paid to review and provide oversight consistent with CERLCA.
- **A Major Performance-based contracting effort for next fiscal year**
  - Replacement of current PBC contracts with LTM requirements
  - Take over ROD to Remedy that only went to ROD in Current PBC
  - MMRP development of Feasibility through ROD for all sites
  - Former Skeet Range, 600 Hill Groundwater, and PICA 111